Please type a plus sign (+) inside this box → ⊞

PTO/SB/8A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known	
Application Number	10/053,355
Filing Date	November 8, 2001
First Named Inventor	ROSSI, A.
Group Art Unit	
Examiner Name	
Attorney Docket Number	A-70882/RMS/AMS

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	5,554,512	A	LYMAN et al.	09-1996	
	A2	5,843,423	A	LYMAN et al.	12-1998	
	A3	6,190,655	B1	LYMAN et al.	02-2001	
	A4	6,261,841	B1	COHEN et al.	07-2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	12/2/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] See attached Kinds of U.S. Patent Documents. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English Language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/8B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 3

Complete if Known	
Application Number	10/053,355
Filing Date	November 8, 2001
First Named Inventor	ROSSI, A.
Group Art Unit	
Examiner Name	
Attorney Docket Number	A-70882/RMS/AMS

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C18	SAITO, H., et al., "Characterization of cord-blood-derived human mast cells cultured in the presence of Steel factor and interleukin-6," *Int Arch Allergy Immunol.* 1995 May-Jun;107(1-3):63-5	
	C19	SAITO, H., et al., "Selective growth of human mast cells induced by Steel factor, IL-6, and prostaglandin E2 from cord blood mononuclear cells," *J Immunol.* 1996 Jul 1;157(1):343-50	
	C20	SUZUKI, H., et al., "Early and late events in Fc epsilon RI signal transduction in human cultured mast cells," *J Immunol.* 1997 Dec 15;159(12):5881-8	
	C21	TORU, H., et al., "Induction of the high-affinity IgE receptor (Fc epsilon RI) on human mast cells by IL-4," *Int Immunol.* 1996 Sep;8(9):1367-73	
	C22	VALENT, P. and BETTELHEIM, P., "Cell surface structures on human basophils and mast cells: biochemical and functional characterization," *Adv Immunol.* 1992;52:333-423	
	C23	WOGNUM, A.W., et al., "Stimulation of mouse bone marrow cells with kit ligand, FLT3 ligand, and thrombopoietin leads to efficient retrovirus-mediated gene transfer to stem cells, whereas interleukin 3 and interleukin 11 reduce transduction of short- and long-term repopulating cells," *Hum Gene Ther.* 2000 Oct 10;11(15):2129-41	
	C24	YAMAGUCHI, M., et al., "IgE enhances Fc epsilon receptor I expression and IgE-dependent release of histamine and lipid mediators from human umbilical cord blood-derived mast cells: synergistic effect of IL-4 and IgE on human mast cell Fc epsilon receptor I expression and mediator release," *J Immunol.* 1999 May 1;162(9):5455-65	
	C25	YANAGIDA, M., et al., " Effects of T-helper 2-type cytokines, interleukin-3 (IL-3), IL-4, IL-5, and IL-6 on the survival of cultured human mast cells," *Blood.* 1995 Nov 15;86(10):3705-14	
	C26	ZHANG, X, et al., "Influence of FL on ex vivo expansion of hematopoietic cells from cord blood in long-term liquid cultures," *Chin J Biotechnol.* 1999;15(3):189-94	

Examiner Signature		Date Considered	12/22/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] Applicant is to place a check mark here if English Language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ⊞

PTO/SB/8B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known	
Application Number	10/053,355
Filing Date	November 8, 2001
First Named Inventor	ROSSI, A.
Group Art Unit	
Examiner Name	
Attorney Docket Number	A-70882/RMS/AMS

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C1	BINGHAM, C.O. 3rd and AUSTEN, KF., "Mast-cell responses in the development of asthma," *J Allergy Clin Immunol.* 2000 Feb;105(2 Pt 2):S527-34	
	C2	BISCHOFF, S.C., et al., "Functional properties of human intestinal mast cells cultured in a new culture system: enhancement of IgE receptor-dependent mediator release and response to stem cell factor," *J Immunol.* 1997 Dec 1;159(11):5560-7	
	C3	DENBURG, J.A., "Basophil and mast cell lineages in vitro and in vivo," *Blood.* 1992 Feb 15;79(4):846-60	
	C4	DVORAK, A.M., "New aspects of mast cell biology," *Int Arch Allergy Immunol.* 1997 Sep;114(1):1-9	
	C5	GHANNADAN, M., et al., "Phenotypic characterization of human skin mast cells by combined staining with toluidine blue and CD antibodies," *J Invest Dermatol.* 1998 Oct;111(4):689-95	
	C6	GILMORE, G.L., et al., "Ex vivo expansion of human umbilical cord blood and peripheral blood CD34(+) hematopoietic stem cells," *Exp Hematol.* 2000 Nov;28(11):1297-305	
	C7	GORDON, J.R., et al., "Mast cells as a source of multifunctional cytokines," *Immunol Today.* 1990 Dec;11(12):458-64	
	C8	HACEIN-BEY, S., et al., "Optimization of retroviral gene transfer protocol to maintain the lymphoid potential of progenitor cells," *Hum Gene Ther.* 2001 Feb 10;12(3):291-301	
	C9	ISHIZAKA, T. et al., "Development of human mast cells from their progenitors." *Curr Opin Immunol.* 1993 Dec;5(6):937-43	
	C10	KEMPURAJ, D., et al., "Characterization of mast cell-committed progenitors present in human umbilical cord blood," *Blood.* 1999 May 15;93(10):3338-46	
	C11	KINOSHITA, T., et al., "Interleukin-6 directly modulates stem cell factor-dependent development of human mast cells derived from CD34(+) cord blood cells," *Blood.* 1999 Jul 15;94(2):496-508	
	C12	KIRSHENBAUM, A.S., et al., "Demonstration that human mast cells arise from a progenitor cell population that is CD34(+), c-kit(+), and expresses aminopeptidase N (CD13)," *Blood.* 1999 Oct 1;94(7):2333-42	
	C13	LAZZARI, L., et al., "Comparison of different serum-free media for ex vivo expansion of HPCs from cord blood using thrombopoietin, Flt-3 ligand, IL-6, and IL-11," *Transfusion.* 2001 May;41(5):718-9	
	C14	NAKAHATA, et al., "Synergy of stem cell factor and other cytokines in mast cell development," in *Biological and Molecular Aspects of Mast Cell and Basophil Differentiation and Function*, Kitamura et al. (eds.) Raven Press, Ltd.: New York, 1995, pp. 13-24	
	C15	OTTO, K.G., et al., "Cell proliferation through forced engagement of c-Kit and Flt-3," *Blood.* 2001 Jun 1;97(11):3662-4	
	C16	RAPPOLD, I. et al., "Functional and phenotypic characterization of cord blood and bone marrow subsets expressing FLT3 (CD135) receptor tyrosine kinase," *Blood.* 1997 Jul 1;90(1):111-25	
	C17	ROBINSON, S., et al., "Comparison of the hematopoietic activity of flt-3 ligand and granulocyte-macrophage colony-stimulating factor acting alone or in combination," *J Hematother Stem Cell Res.* 2000 Oct;9(5):711-20	

Examiner Signature		Date Considered	12/22/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] Applicant is to place a check mark here if English Language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.